Trip Report

Saint Michael, Alaska

September 4, 2012

1. Participants

Team members were Jason Norris and Emily Morrison (CEPOA-PM-C-PL), Erin Laughlin (CEPOA-G-ER), and Dee Ginter (CEPOA-G-HH).

2. Trip Purpose

The team traveled to Saint (St.) Michael, Alaska on June 20-21, 2012, to conduct a site visit with the goals of assessing the feasibility of constructing waterfront improvements related to the community's Denali Commission application. While in St. Michael, the team participated in a joint meeting of the City of Saint Michael and St. Michael Native Corporation.

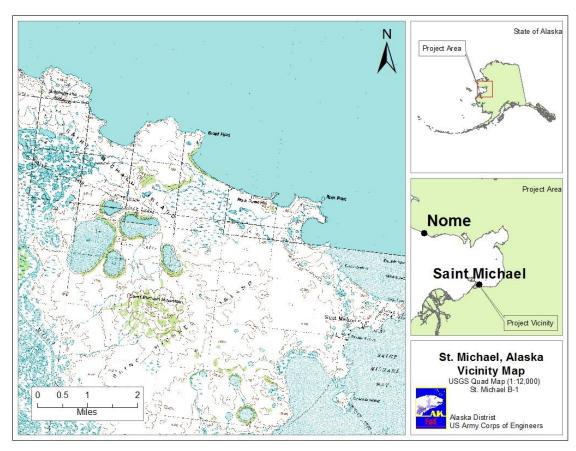


Figure 1. Location of St. Michael

The intent of the trip was to investigate waterfront development at St. Michael, specifically related to port facilities. The application suggested two sites for examination: one between Rock Point and Broad Point and another in Halfway Cove. Anticipated ancillary benefits from the development included a port fee structure for the city, a propane storage facility, and a Coast Guard station. The application suggested that this port development would include the construction of a herring processing plant. Supporting documents attached to the application included: a supporting resolution from St. Michael Native Corporation, a supporting resolution from the Native Village of St. Michael, a letter of support from Alaska State Sen. Donald C. Olson.

3. Community Description

St. Michael is a community of 411 people (2011 State of Alaska Department of Labor and Workforce Development estimate) on the northeast corner of St. Michael Island, 125 miles southeast of Nome, and 420 miles west-northwest of Anchorage. There are multiple waterfront assets currently in the community. There is a privately-owned barge landing and boat launch near the south end of the community (Figure 2).



Figure 2. Barge Landing and Boat Launch

In addition, there is a dock at the north end of the community that was built by Crowley Maritime Corporation in order to facilitate fuel deliveries to an adjacent tank farm.



Figure 3. Crowley Fuel Dock

4. Pre-Visit Investigation

Prior to visiting the community, the team contacted, or attempted to contact, the following people:

- 1. Alberta Steve, St. Michael Native Corporation
- 2. John Henery, St. Michael Native Corporation
- 3. Delores Otten, City Clerk, City of Saint Michael
- 4. Charlie Lean, Director, Norton Sound Fisheries Research and Development Program, Norton Sound Economic Development Corporation (NSEDC)
- 5. Sharm Setterquist, Port Captain, Crowley Marine

Mrs. Steve, Mr. Henery, and Mrs. Otten gave basic information about the project and helped arrange transportation for the team while in St. Michael. We attempted but were unable to speak with Mr. Lean or Mr. Setterquist prior to our visit.

Based on the application packet provided by the Denali Commission, St. Michael Native Corporation wishes to partner with NSEDC to increase local participation in the herring fishery in Norton Sound, which they believe to be currently underutilized. The community of St. Michael believes NSEDC has an interest in building a herring

processing plant at St. Michael. In addition, the application stated a desire for the plant to be located close to both the airport and existing utilities.

The application packet listed two potential sites for waterfront development. The preferred site is any location between Rock Point and Broad Point with a secondary location in Halfway Cove. Initial investigations by the Corps indicate that these locations may have a shorter seasonal usage period as it appears the north side of the island is last to have ice go out in the spring. Therefore, another site in an east-facing cove off the north end of the runway was identified (Site 3). Site 3 is partially protected by Beulah and Whale Islands as well as Orzaba Reef. Alberta Steve confirmed that this site could be a possibility but access is tidally dependent. Alberta Steve said her counterparts at the City prefer utilizing the soon-to-be-vacant Crowley Dock.



Figure 4. Alternative Sites (source: Google Earth with USACE Amendments)

5. Site Conditions and Visit Notes

Dee Ginter arrived in St. Michael on 20 June to visit the sites by boat with the intent of determining water depths at each site. The balance of the team arrived in St. Michael at approximately 11AM on 21 June and was met at the airport by Alberta Steve of St. Michael Native Corporation. During the drive, the team was told that Crowley has suspended deliveries to St. Michael because their tanks could no longer pass inspection.

Because of this, St. Michael participates in a consolidated bulk fuel distribution program organized by NSEDC in which one fuel supplier is used by participating NSEDC communities in order to achieve a cost savings by purchasing in bulk. As a result of this, Delta Western now delivers fuel to the City. However, the City's space is limited, and is insufficient to sustain the community's fuel needs for the duration between deliveries. Therefore, the City is supplementing their supply by flying fuel in via Everts Air Fuel. Because of this, fuel and heating oil is currently retailing for approximately \$11/gallon plus tax. Residents have the option of driving to Stebbins (22 miles round trip) to procure fuel at a cheaper rate.

The team then participated in a joint meeting of the City of St. Michael and St. Michael Native Corporation. While the City and Corporation were able to establish quorums it was noted that various members from either side were unable to attend as they were out participating in the bait herring fishery for delivery to the Norton Sound Seafood Products facility in Unalakleet. The community commented on the proposed sites, proposed an additional site, and forwarded ideas for development around a proposed harbor. Specifically, they expressed an interest in combining a fuel delivery facility with any waterfront improvements, staging oil spill response vessels at St. Michael, and leasing storage space to Unalakleet Corporation (who has expressed interest in this in the past). Other development concepts are contained in the Local Economic Development Plan which is available on Kawerak's website.

The meeting concluded with the City and Corporation passing a motion to support examination of sites at Halfway Cove and anywhere inside Standard Oil Cove.

The team sought the community's input on the proposed sites, then visited the sites via automobile. Notes from the site visits follow:

a. Rock Point to Broad Point. This site was investigated via boat on 20 June. The western side of the bay is characterized by high, rocky bluffs that extend to the waterline. The eastern side of the bay has lower bluffs and better access to the water. However, road access to the eastern side would be longer than the western side, could impact local lakes, and would likely impact a locally-preferred berry picking area. In addition, the nearshore bottom appears to be shallow and rocky.

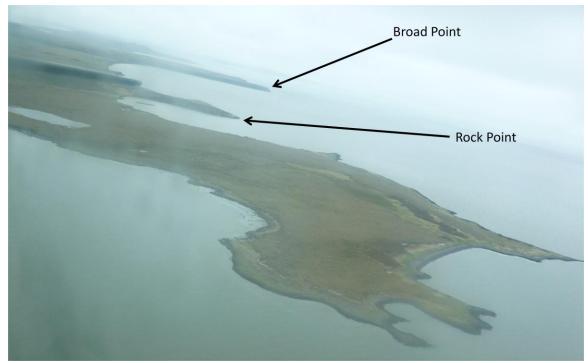


Figure 5. Rock Point and Broad Point

b. Halfway Cove. This site was investigated via boat on 20 June and automobile on 21 June. It is approximately 110 acres in size with a 1,000 meter opening. The shore is characterized by low bluffs fronting a narrow beach. Depths of 8 feet or less were measured up to 500 feet away from shore. The bottom appeared to be made of softer material than that between Rock and Broad Points. The local opinion is that a dredged channel in Halfway Cove may not stay open due to sediment transport from the Yukon River.

A representative sample of visible soil surfaces bordering the shoreline as well as the sands of the beach were examined with no cultural materials identified. A review of the Alaska Heritage Resources Survey (AHRS) revealed that no archaeological surveys have been performed within Halfway Cove. It is possible that extant subsurface prehistoric or historic sites may have been washed away as the shoreline has eroded. Nevertheless, Norton Sound has been inhabited by various populations of Eskimos for the past 10,000 years. Because of this, an archaeological reconnaissance survey is recommended prior to construction.

c. Site 3. This site was investigated via boat on 20 June. It is approximately 180 acres in size with a 635 meter opening. The shore is characterized by bluffs fronting a mostly narrow beach. This area was observed to be fairly shallow with tidally-dependent access.

d. Standard Oil Cove. This site was not mentioned in the application packet. However, during the joint meeting, members of both the city council and corporation expressed great interest in utilizing a site within Standard Oil Cove. Therefore, the team visited the site via automobile on 21 June. There are existing facilities within the cove. Crowley built a dock on the northern end of the cove to facilitate fuel deliveries (Figure 6). Crowley no longer delivers fuel to the community and the tanks are not used. There is also a beach with existing vehicle access on the west side of the cove. This beach is primarily used to launch/retrieve skiffs but has been used for larger items such as prebuilt modular homes. There are private land concerns within the cove as Crowley owns the land underneath its facilities.

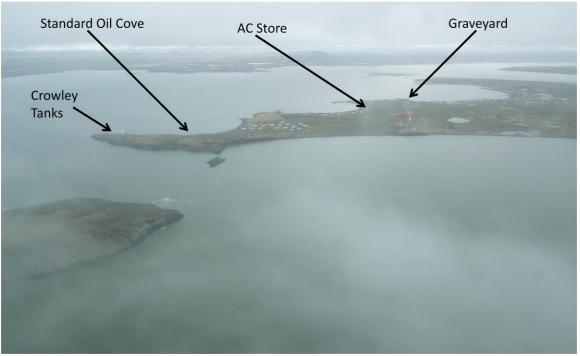


Figure 6. Overview of St. Michael (airport off frame 2 miles to the right).

In addition, there are multiple State Historical Preservation Office (SHPO)-designated historical/archaeological sites in the surrounding uplands. To the northwest of the Crowley tanks is a cemetery that may have been associated with Fort St. Michael (AHRS no. SMI-078) and the Washington-Alaska Military Cable and Telegraph System Station (WAMCATS) (AHRS no. SMI-048). Abutting the cemetery is the site of the former WAMCATS station, a contributing feature to Fort St. Michael, a property on the National Register of Historic Places (AHRS no. SMI-015). Adjacent to the WAMCATS site and east of Old Village Street and between Cemetery and Pioneer Streets lies extensive surface and subsurface archaeological remains related to Fort St. Michael and the gold rush era (AHRS no. SMI-045).

The southern reach of the cove (Figure 7) contained several scattered, rusting remnants of sternwheelers. These ship components have been assigned an AHRS number (SMI-081), although they have not been evaluated for eligibility for the National Register. The ridge above the southern portion of the cove contains two historic properties including Old Tachik (AHRS no. AMI-044) and a gravesite in use during the 1918 flu epidemic (AHRS no. SMI-074). Neither of these properties have received a determination of eligibility for the National Register. If the project area is to include any portion of these six sites, an intensive archaeological survey and/or an archaeological monitor will be necessary.



Figure 7. Old Tachik and Flu Epidemic Gravesite (view: southwest)

6. Follow-up Investigations

Upon returning to the office the Corps spoke with Charlie Lean, Director, Norton Sound Fisheries Research & Development. He stated that NSEDC has no plan to construct a herring processing plant at St. Michael in the near future but that it was a very long term idea. He stated that their tenders draft 6 feet or less out of necessity as there are other shallow bays in the area, (such as Unalakleet). He said that the most protected and favorable site to build a facility would be within St. Michael's Bay, specifically at "AC Point" (near the AC Store). He said that there used to be a dock in this location that was

built by Northern Commercial Company, (the predecessor to AC). The dock was destroyed by ice many years ago but this remains the most favorable site in his opinion. It does not have rocks on the bottom like other places in St. Michael's Bay and it has a decent amount of water that could support their tenders under favorable tide conditions. Mr. Lean also said that this beach is protected by SHPO designation and that a previous effort by NSEDC to conduct a beach cleanup was shut down by SHPO as it threatened historical steam ship parts on the beach.

The Corps also spoke with Brent Petrie, Project Manager, Alaska Village Electrical Cooperative (AVEC), and Mr. David Lockard, Project Manager, Alaska Energy Authority, regarding their entities' future development plans on St. Michael Island. Items learned during these discussions are contained in Section 7 entitled "Fuel Discussion".

The Corps also attempted to contact the U.S. Coast Guard (USCG) Anchorage Public Affairs Detachment regarding a possible USCG presence at St. Michael but as of the time of this report they have not responded.

The Corps attempted to contact Mr. Setterquist for input but at the time of this report, he has not responded.

7. Fuel Facilities

Since the construction of a herring processing plant is not a near-term goal for NSEDC, the community's biggest need is for a facility that facilitates delivery and storage of fuel. Crowley has discontinued service to St. Michael, leaving the city to serve as the sole fuel distributor for the community. The city has a limited amount of storage and cannot meet the community's needs for the duration between barge deliveries. Because of this, they have been forced to fly fuel in which raised fuel prices to approximately \$11 per gallon.

The Denali Commission is funding construction of an 860,000 gallon bulk fuel facility at Stebbins (Project #01303) as part of AVEC's construction of a new prime-power plant. This power plant will supply power to both Stebbins and St. Michael. Mr. Petrie stated that the new power plant will begin generation in 2013 with the fuel facility able to accept fuel in fall of 2012. Mr. Petrie stated that the fuel facility has been constructed with a certain amount of excess capacity or "freeboard" that takes into account future fuel needs given 10 years of population growth on the island as well as the installation of a piped water system at Stebbins. He said that this excess capacity could possibly provide enough storage for St. Michael's non-utility fuel needs on a three to four year interim basis. Under this arrangement, residents of St. Michael would procure gasoline from the station in Stebbins and from SMNC (St. Michael Native Corporation). In addition, SMNC owns a 5,000-gallon fuel truck that could deliver heating oil to residents in St. Michael.

A conversation with Mr. David Lockhard of AEA revealed that they are gathering information to begin constructing a bulk fuel upgrade for St. Michael. He said that SMNC has conducted a Phase 1 site investigation of the Crowley fuel farm site and found that it contains at least a moderate risk of contamination. Therefore, AEA is working with SMNC to identify a site that is preferable to the community and convenient for barges. Mr. Lockhard stated that if all goes well, construction of the new fuel farm could take place in 2014, giving St. Michael its own fuel supply before the excess capacity at Stebbins is extinguished.

8. Recommendation

At this time there is no evidence that USCG plans to locate assets at St. Michael. In addition, NSEDC has stated that there are no near-term plans to construct a herring processing facility at St. Michael. Without these revenue-contributing activities, the community would be burdened with fully funding the maintenance and operations costs of a port facility. Furthermore, if there was sufficient commercial activity to support port development, it would be difficult to construct a facility in the community's preferred area without encountering cultural resources, contamination, or both.

Due to the lack of any near term commercial or government activity at St. Michael, there is no economically justified reason for developing a port facility. Other entities with expertise in constructing bulk fuel facilities are actively addressing St. Michael's fuel needs. Because of these circumstances, there appear to be no issues within the scope of this study for the Corps to address, and therefore it is recommended that this study be terminated.